

### REMARKS

In the Office Action dated December 27, 2007, Claims 16 and 18-20 are pending. Claims 1-16, 19 and 20 have been withdrawn from consideration as directed to non-elected subject matter. Claim 18 is considered on the merits. Claim 18 is rejected under 35 U.S.C. §112, first paragraph, as allegedly lacking enabling support and as allegedly failing to comply with the written description requirement. Claim 18 is also rejected under 35 U.S.C. §102(b) as allegedly anticipated by GenBank accession number AA101561, October 1996. Claim 18 is further rejected as allegedly unpatentable over claim 1 of U.S. Patent No. 6,699,688 on the grounds of non-statutory double patenting. In addition, the Examiner rejects Claim 18 under 35 U.S.C. §112, second paragraph, as allegedly indefinite.

This Response addresses each of the Examiner's rejections. Applicant therefore respectfully submits that the present application is in condition for allowance or at least in better condition for appeal. Favorable consideration of all pending claims is therefore respectfully requested.

In the first instance, Applicants have canceled the non-elected Claims 1-16 and 19-20 in response to the Final Official Action. Applicants reserve the right to file one or more divisional applications directed to the non-elected subject matter.

Claim 18 is rejected under 35 U.S.C. §112, first paragraph, as allegedly lacking enabling support and as allegedly failing to comply with the written description requirement. The Examiner acknowledges that the present application is enabling for a polynucleotide of SEQ ID NO: 1 and fragments of SEQ ID NO:1. However, the Examiner alleges that the present application does not provide enablement for sequences from other species, mutated sequences, allelic variants, or sequences that hybridize under undefined high stringency conditions to all

fragments of SEQ ID NO:1. The Examiner is essentially concerned the claim encompasses DNA oligomers that are not derived from SEQ ID NO:1.

Before addressing the merits of the Examiner's rejections, Applicants have amended Claim 18 in an effort to favorably advance prosecution without requirement for further searching by the Examiner. Applicants reserve the right to file a continuation application to pursue the subject matter of Claim 18 as originally presented. Claim 18, as amended, delineates the high stringency hybridization conditions. Support for the amendment to Claim 18 is found in bridging paragraph of pages 16-17 of the specification. Applicants also added Claim 21. Claim 21 recites a DNA oligomer having sequence as set forth in SEQ ID NO: 1, nucleotides 16-912 of SEQ ID NO:1, or nucleotides 97-912 of SEQ ID NO: 1. Support for Claim 21 is found in Claim 18 as previously presented. No new matter is introduced by the amendment of Claim 18 or the addition of Claim 21.

Applicants respectfully submit that Claim 18, as amended, is directed to a DNA oligomer that is capable of hybridizing under the recited high stringency conditions to a nucleic acid molecule having a nucleotide sequence of SEQ ID NO: 1, nucleotides 16-912 of SEQ ID NO:1, or nucleotides 97-912 of SEQ ID NO: 1.

Applicants respectfully submit that the present application discloses the sequence information for SEQ ID NO: 1. The present application also teaches specific primers derived from SEQ ID NO: 1. See, e.g., specification, on page 28, line 20 to page 29, line 11. It is routine for one skilled in the art to design and make a specific DNA oligo primer once the template sequence is known. As such and further in view of the amendment to Claim 18, Applicants respectfully submit that the present application provides sufficient description and guidance for

one skilled in the art to make and use the DNA oligomer of Claim 18, as amended, without undue experimentation.

Applicants also respectfully submit that based on the disclosure of the specification, it is routine for one skilled in the art to design and make a specific DNA oligo primer based on the sequence information of SEQ ID NO: 1. Therefore, in view of the amendment to Claim 18, Applicants respectfully submit that the specification provides sufficient disclosure in such a way as to convey to one skilled in the relevant art that the inventors had possession of the claimed invention at the time the application was filed.

As such, the rejections of Claim 18 under 35 U.S.C. §112, first paragraph, as lacking enabling support and as allegedly failing to comply with written description requirement are overcome. Withdrawal of both rejections is respectfully requested.

Claim 18 is rejected under 35 U.S.C. §102(b) as allegedly anticipated by GenBank accession number AA101561, October 1996. The Examiner contends that GenBank accession number AA101561 discloses a DNA molecule (oligomer) that is 99.2% identical to SEQ ID NO: 2 over a region of 377 bases (see sequence alignment provided in parent application 09/397,243) and would thus hybridize to a polynucleotide of SEQ ID NO: 2 under highly stringent conditions.

Applicants respectfully submit that Claim 18, as amended, no longer recites SEQ ID NO: 2 or its fragments. Applicants also submit that the claimed oligomer does not hybridize in full-length with the sequences cited in the art. As such, the rejection of Claim 18 under 35 U.S.C. §102(b) is overcome and withdrawal thereof is respectfully requested.

Claims 17 and 18 are rejected as allegedly unpatentable over claim 1 of U.S. Patent No. 6,699,688. The Examiner raised this rejection on the ground of non-statutory double patenting. The Examiner alleges that the claims, if allowed, would improperly extend the "right

to exclude" already granted in the parent. The Examiner alleges that Claim 1 of U.S. Patent No. 6,699,688 claims a DNA oligomer having sequence of 16-912 nucleotides of SEQ ID NO: 1.

Applicants have filed a terminal disclaimer. As such, the rejection of Claim 18 over Claim 1 of U.S. Patent No. 6,99,688 is overcome and withdrawn thereof is respectfully requested.


Therefore, the rejection of claims 17 and 18 as allegedly unpatentable over claim 1 of U.S. Patent No. 6,699,688 is overcome and withdrawal thereof is respectfully requested.

The Examiner rejects Claim 18 under 35 U.S.C. §112, second paragraph, as allegedly indefinite by reciting "under high stringency conditions." The Examiner acknowledges that the specification describes examples of high stringency conditions but fails to define what is encompassed with high stringency conditions.

Applicants respectfully submit that Claim 18, as amended, now recites high stringency conditions supported by the application. As such, Claim 18, as amended, is clear and not indefinite. Therefore, the rejection of Claim 18 under 35 U.S.C. §112, second paragraph, is overcome and withdrawal thereof is respectfully requested.

In view of the foregoing amendments and remarks, it is firmly believed that the subject application is in condition for allowance, which action is earnestly solicited.

Respectfully submitted,



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